

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

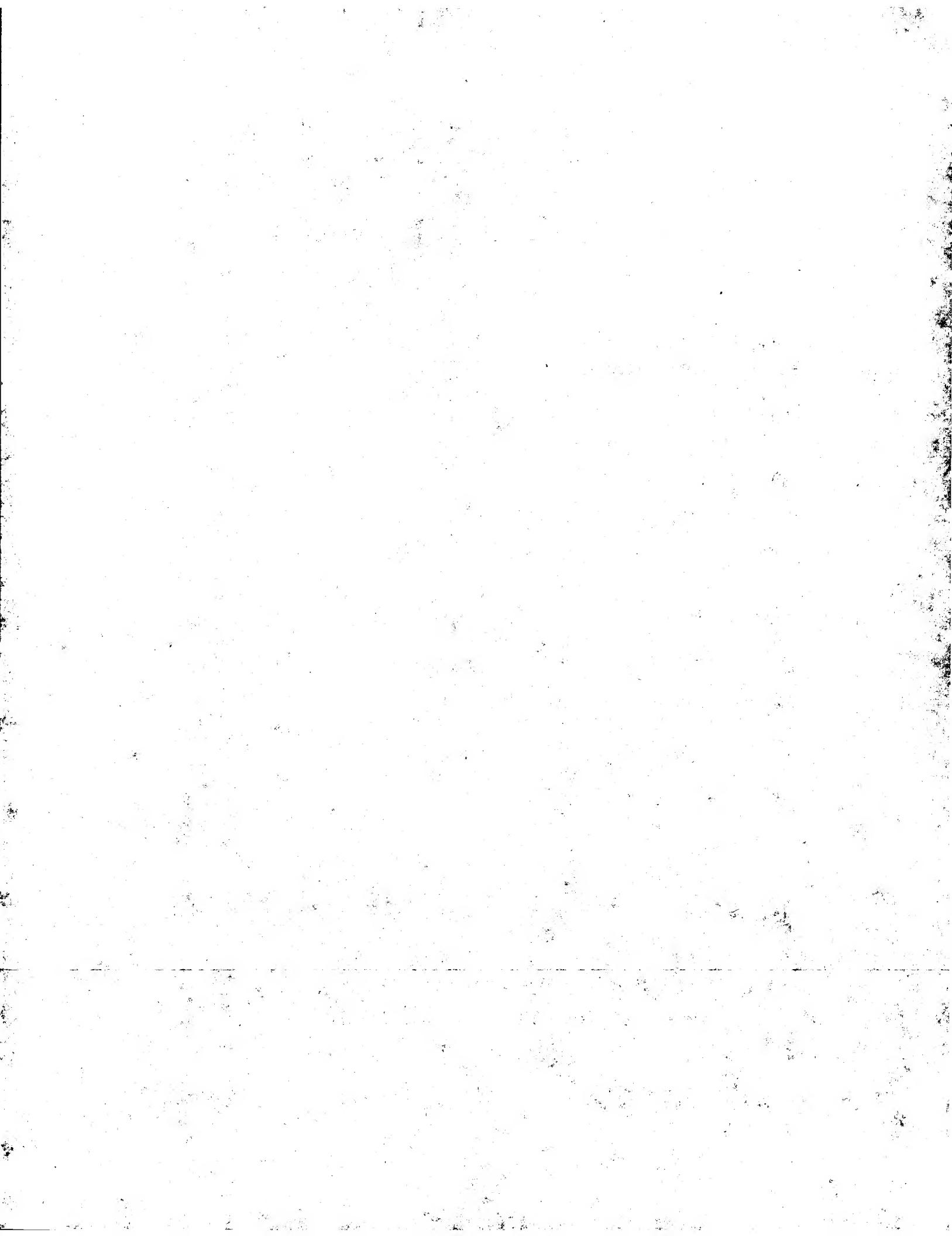
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-123297  
 (43)Date of publication of application : 11.05.1999

(51)Int.Cl. D06F 35/00  
 D06F 39/02

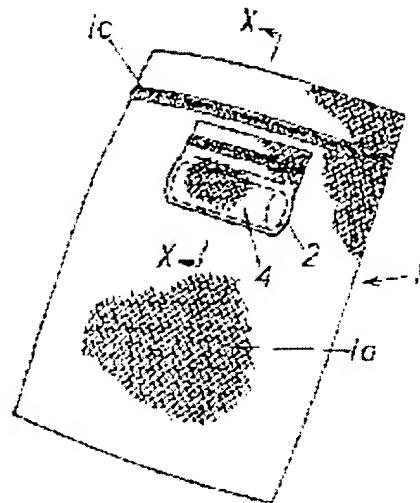
(21)Application number : 09-288188 (71)Applicant : SURUGA KK  
 (22)Date of filing : 21.10.1997 (72)Inventor : KATSUMATA YASUSHI

## (54) WASHING NET AND WASHING OF WASH

## (57)Abstract:

PROBLEM TO BE SOLVED: To easily impart the action of chemicals and a detergent to a wash by arranging an auxiliary housing part to house chemicals and a detergent in a housing part in a washing net where an opening part to take the wash in and out of its inside is arranged in the housing part which has water permeability and inside which the wash is housed.

SOLUTION: A washing net 1 which prevents entanglement of a wash with the other wash and is used to prevent sticking of a waste thread, has a housing part 1a which has water permeability and is formed in a bag shape out of a net-like raw material and an opening part to take the wash in and out of the housing part 1a, and the opening part is formed so as to be openable/ closable by a slide fastener 1c. In this case, an auxiliary housing part 2 to house chemicals and a detergent is arranged, for example, on the outside of the housing part 1a. Chemicals 3 such as granular calcium sulfite are wrapped and housed in this auxiliary housing part 2 by a freely openable/closable member 4 composed of a water permeable net-like raw material. Therefore, service water is reduced (or dechlorinated), and the facing of the wash is prevented.



## LEGAL STATUS

[Date of request for examination] 10.10.2000  
 [Date of sending the examiner's decision of rejection] 08.04.2003  
 [Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]  
 [Date of final disposal for application]  
 [Patent number]  
 [Date of registration]  
 [Number of appeal against examiner's decision of rejection]  
 [Date of requesting appeal against examiner's decision of rejection]  
 [Date of extinction of right]

\* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

CLAIMS

---

[Claim(s)]

[Claim 1] A wash network characterized by establishing a stowage which puts the washing into the interior while having water flow nature, and an auxiliary stowage which contains a chemical, a detergent, etc. in a wash network equipped with opening which takes said washing in and out to this stowage in said stowage.

[Claim 2] A wash network according to claim 1 characterized by preparing an auxiliary stowage out of a stowage.

[Claim 3] A wash network according to claim 1 characterized by wrapping calcium sulfite of granular or granularity in a member which has water flow nature, and containing to an auxiliary stowage.

[Claim 4] A wash network according to claim 1 characterized by establishing an auxiliary stowage in a stowage free | attachment and detachment ].

[Claim 5] A wash method of the washing of putting in said washing in a wash network equipped with an auxiliary stowage which contained calcium sulfite of granular or granularity in a method of the washing of putting in the washing, tap water, and a detergent into a washer, and washing the washing, and washing said washing.

---

[Translation done.]

## \* NOTICES \*

Japan Patent Office is not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

## DETAILED DESCRIPTION

---

### [Detailed Description of the Invention]

[0001] This invention relates to the wash method of a wash network and the washing, and relates to the wash method of the washing which used the wash network and this wash network which equipped the stowage into which the washing is put especially with the auxiliary stowage which contains a chemical, a detergent, etc.

[0002]

[Description of the Prior Art] Although the washing put the detergent into the tap water in an electric washing machine and was washed, since bleaching powder was contained in tap water, when the washing of variety entertainments was washed, it had the trouble of being decolored.

[0003] In order to cancel this trouble, there is an electric washing machine of the dedication it was made to make the tap water which flows in an electric washing machine contain calcium sulfite (CaSO<sub>3</sub>).

[0004]

[Problem(s) to be Solved by the Invention] However, although he is trying to make tap water contain calcium sulfite if it is in the electric washing machine of this dedication as tap water is contacted to calcium sulfite only when tap water flows in an electric washing machine In one contact in water, with the low solubility of calcium sulfite (It is 1g / of 20-degree C water / 100 ] 0.25g in 100g (0.2g and 30 degrees C) of water) There were also things, calcium sulfite did not melt into tap water enough, but there were few the effects and the trouble that it was not application easily had them in the further existing electric washing machine structurally.

[0005] This invention aims at offering the wash method of the wash network from which said trouble was removed, and the washing.

[0006]

[Means for Solving the Problem] In order to attain the above-mentioned object, a wash network of this invention establishes a stowage which puts the washing into the interior while having water flow nature, and an auxiliary stowage which contains a chemical, a detergent, etc. in a wash network equipped with opening which takes said washing in and out to this stowage in said stowage.

[0007] Moreover, a wash network according to claim 2 prepares an auxiliary stowage out of a stowage in a wash network according to claim 1.

[0008] Moreover, in a wash network according to claim 1, a wash network according to claim 3 wraps calcium sulfite of granular or granularity in a member which has water flow nature, and contains it to an auxiliary stowage.

[0009] Moreover, a wash network according to claim 4 establishes an auxiliary stowage in a stowage free [ attachment and detachment ] in a wash network according to claim 1.

[0010] Moreover, in a method of the washing of putting in the washing, tap water, and a detergent into a washer, and washing the washing, a wash method of the washing according to claim 5 puts in said washing in a wash network equipped with an auxiliary stowage which contained calcium sulfite of granular or granularity, and washes said washing.

[0011]

[Example] The wash network of one example of this invention and the wash method of the washing are explained with reference to a drawing. It sets to drawing\_1 thru/or drawing\_3. 1 is the wash network to which it is made for waste thread not to be attached while making it the washing not involved with other washing, and the wash network 1 is equipped with opening 1b which takes the washing (not shown) in and out to stowage 1a which is formed in saccate and puts the washing (not shown) into the interior, and this stowage 1a while it is formed reticulated and has water flow nature. Opening 1b is opened and closed by slide fastener 1c.

[0012] The auxiliary stowage 2 which contains a chemical, a detergent, etc. is formed out of stowage 1c at stowage 1c.

[0013] in this auxiliary stowage 2, a chemical 3 (a chemical 3 -- for example, a grain -- it is granularity calcium sulfite (CaSO<sub>3</sub>) more desirably.) is wrapped in the member 4 (refer to drawing\_2 ) which has water flow nature, for example, the member which can be opened and closed and which was formed reticulated, and it is contained by the auxiliary stowage 2. About calcium sulfite 3, more desirably, since calcium sulfite 3 has low solubility (0.25g of calcium sulfite 3 dissolves in 100g of 20-degree C water at 100g (0.2g and 30 degrees C) of water, respectively.), the grain and having considered as granularity are because [ increasing the outside-surface product of calcium sulfite 3, and making it contact more tap water ] granular by considering as granularity.

[0014] Therefore, the washing, tap water, a detergent, and the washing that is easy to be decolored in the wash network 1 equipped with the auxiliary stowage 2 which contained the calcium sulfite 3 of granular or granularity are put in into the washer which is not illustrated, and the washing is washed.

[0015] Consequently, calcium sulfite 3 dissolves in the tap water which touches the washing put into stowage 1c of the wash network 1 from the auxiliary stowage 2, and tap water is made to return (or dechlorination). It is made not to receive an operation of the bleaching powder of tap water especially in the washing put into stowage 1c. Decoloring of the washing is prevented (delay progress of decoloring) and, moreover, solubility is granular in the low calcium sulfite 3 (desirably). Since it is considering as granularity, it can avoid receiving an operation of the bleaching powder of tap water in the washing, as contact in water is made [ many ] during wash and much calcium sulfite 3 is dissolved with tap water.

[0016] In addition, in an above-mentioned example, although the calcium sulfite (CaSO<sub>3</sub>) of granular or granularity was mentioned as a chemical 3, if it is in this invention, not only this but the chemicals 3, such as an antimicrobial agent and an antistatic agent, and a detergent may be used. And a thing granular [ what also has the comparatively large gestalt at a solid of the chemical 3 put into the auxiliary stowage

2 and a detergent ] as it is, and small is covered in the member which has water flow nature, for example, a nonwoven fabric, and the network formed reticulated, if it is a liquid, will put this liquid into the container equipped with the liquid tap hole, for example, and will contain this container to the auxiliary stowage 2.

[0017] Thus, if the auxiliary stowage 2 which contains a chemical, a detergent, etc. is established in stowage 1c of the wash network 1, the washing is put into stowage 1c of the wash network 1 and it washes with a washer, an operation of a chemical, a detergent, etc. can be made easy to receive in the washing put into stowage 1c of the wash network 1, and since the auxiliary stowage 2 is united with stowage 1c, moreover, only the auxiliary stowage 2 will not be forgotten.

[0018] Moreover, not only the drawing 1 publication but drawing 4 thru/or the drawing 6 publication are sufficient as the part of the auxiliary stowage 2.

[0019] That is, the auxiliary stowage 2 is established in the corner of the wash network 1, and you may make it contain the member 4 which has water flow nature for a chemical 3 (for example, a grain, more desirably granularity calcium sulfite (CaSO3)) in the auxiliary stowage 2, as shown in drawing 4.

[0020] In addition, it can open [ although not illustrated ] the auxiliary stowage 2 of the corner of the wash network 1 and close freely, for example so that a chemical 3 and a detergent can be contained with a fastener, a field-like fastener, etc.

[0021] Moreover, the auxiliary stowage 2 is also established in the flank of the wash network 1, and you may make it contain the member 4 which has water flow nature for a chemical 3 (for example, granularity calcium sulfite (CaSO3)) in the auxiliary stowage 2, as shown in drawing 5.

[0022] Moreover, the auxiliary stowage 2 is formed free [ attachment and detachment ] through Hook F out of for example, stowage 1c, and you may make it also equip the existing wash network 1 with it at stowage 1c, as shown in drawing 6.

[0023]

[Effect of the Invention] If the washing is put into the stowage of a wash network and it washes with a washer, it can be made easy to receive an operation of a chemical, a detergent, etc. to the washing put in to the stowage of a wash network, and since the auxiliary stowage which contains a chemical, a detergent, etc. was established in the stowage of a wash network according to the wash network according to claim 1, since the auxiliary stowage is united with the stowage, moreover, only an auxiliary stowage will not be forgotten.

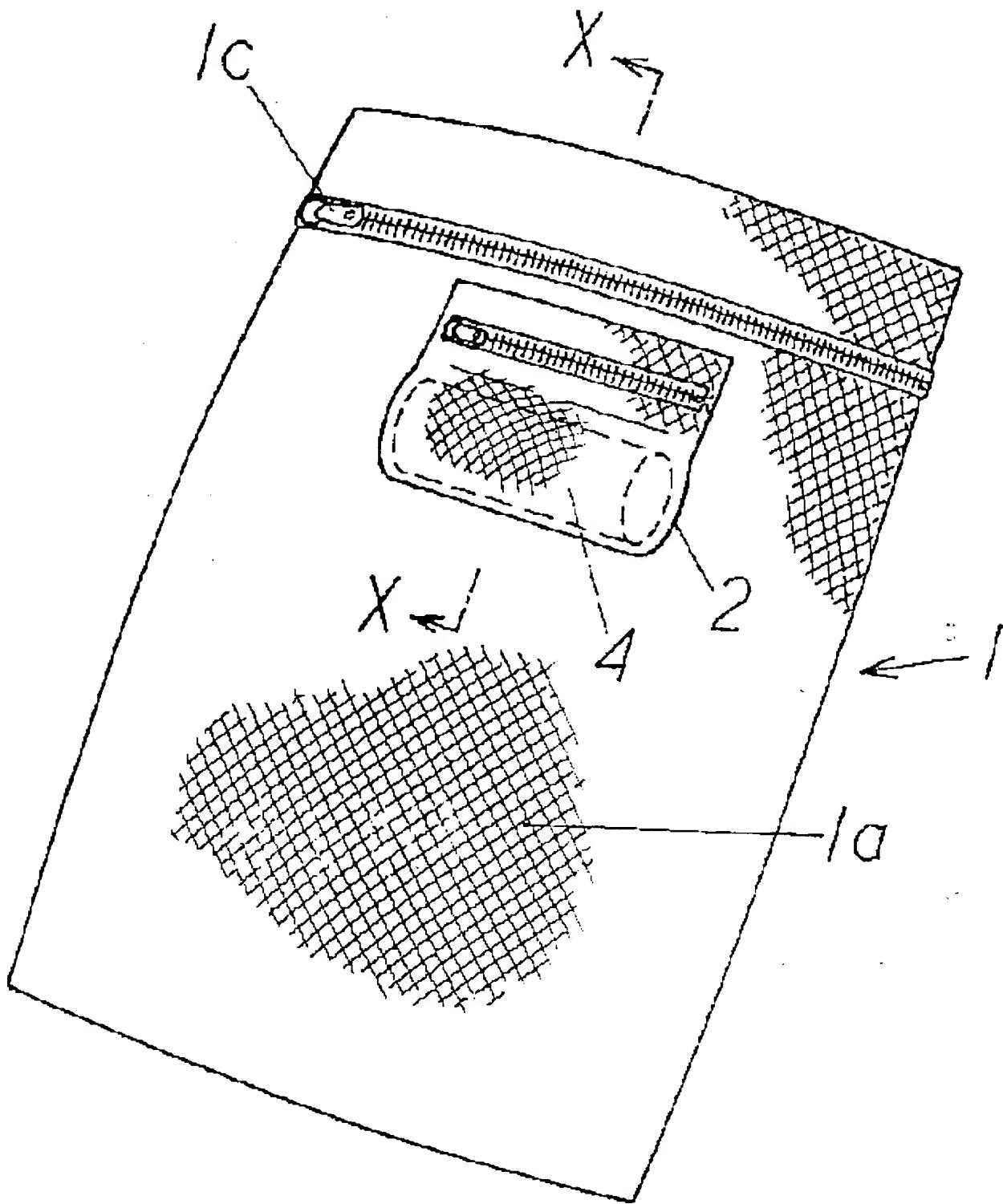
[0024] Moreover, if an auxiliary stowage is prepared inside a stowage, the inconvenience on which the chemical with which the auxiliary stowage was taken up with the washing contained by the stowage, and was contained by the auxiliary stowage, a detergent, etc. stop being able to act easily will be produced, but since the auxiliary stowage is prepared [ according to the wash network according to claim 2 ] out of the stowage in addition to the effect of the invention according to claim 1 mentioned above, said inconvenience is cancelable.

[0025] Moreover, according to the wash network according to claim 3, it adds to the effect of the invention according to claim 1 mentioned above. Make tap water return with calcium sulfite (or dechlorination), and it is made not to receive an operation of the bleaching powder of tap water especially in the washing put into the stowage. Decoloring of the washing is prevented (delay progress of decoloring). Since solubility of calcium sulfite is moreover low, As it considers as granularity, contact in water is made [ many ] and much calcium sulfite can be dissolved with tap water, granular or the thing for which decoloring is prevented (delay progress of decoloring) can do calcium sulfite.

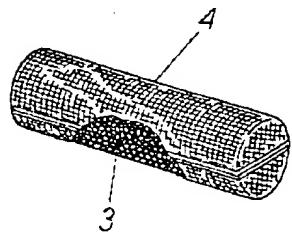
[0026] Moreover, according to the wash network according to claim 4, in addition to the effect of the invention according to claim 1 mentioned above, the auxiliary stowage which contains a chemical, a detergent, etc. also with the existing wash network can be attached easily.

[0027] Moreover, if the calcium sulfite of granular or granularity is contained to the auxiliary stowage of a wash network according to the wash network according to claim 5 and the washing is put in and washed to a stowage Calcium sulfite dissolves in the tap water which touches the washing put into the stowage of a wash network, and it is made not to receive an operation of the bleaching powder of tap water especially in the washing put into the stowage. Decoloring of the washing is prevented (delay progress of decoloring). Moreover, solubility low calcium sulfite Granular or since it is considering as granularity. As contact in water is made [ many ] and much calcium sulfite is dissolved with tap water, it can avoid receiving an operation of the bleaching powder of tap water especially in the washing put into the stowage.

[Translation done.]

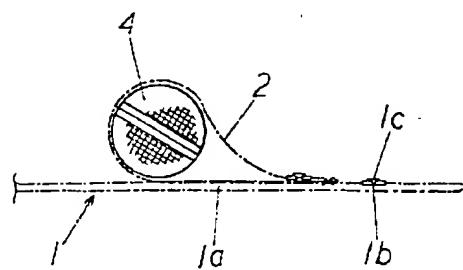


Drawing selection drawing 2



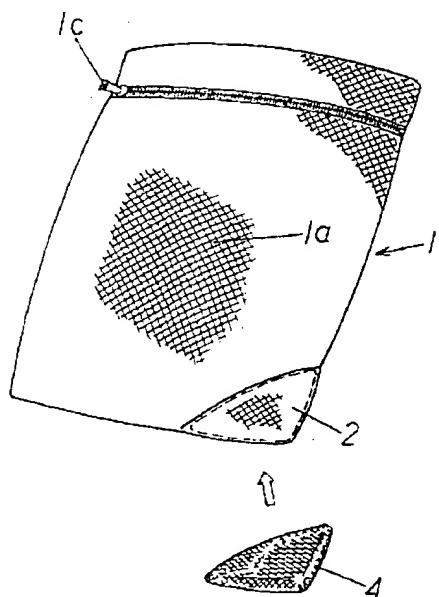
[Translation done.]

Drawing selection drawing 3



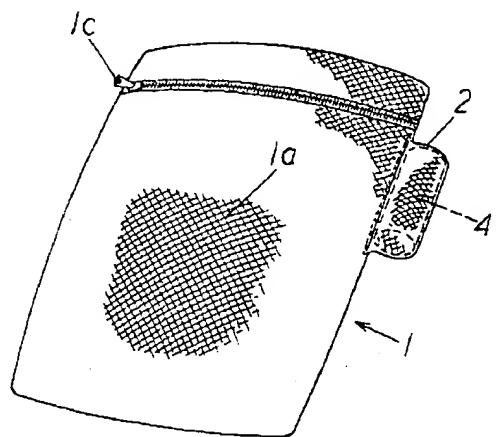
[Translation done.]

## Drawing selection drawing 4



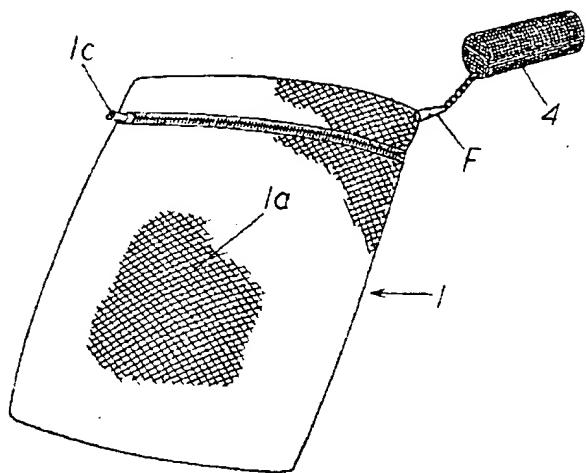
[Translation done.]

Drawing selection drawing 5



[Translation done.]

Drawing selection drawing 6



[Translation done.]